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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/627,512 | 07/25/2003 | Ralph H. Castro | K35A1302 | 3270 |

26332 7590 08/23/2004

WESTERN DIGITAL CORP.
20511 LAKE FOREST DRIVE
C205 - INTELLECTUAL PROPERTY DEPARTMENT
LAKE FOREST, CA 92630

EXAMINER

PEUGH, BRIAN R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2187

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/627,512 | CASTRO ET AL. | |
| | Examiner | Art Unit | |
| | Brian R. Peugh | 2187 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-14 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-22 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>8/10/04</u> |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

The Declaration filed on October 22, 2003 under 37 CFR 1.131 is sufficient to overcome the Sokolov et al. (US# 6,018,789) reference. Thus, the previous rejections attributed to the Sokolov et al. reference have been withdrawn.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, and 4 of U.S. Patent No. 6,601,137. Although the conflicting claims are not identical, they are not patentably distinct from each other because still reads upon the aforementioned patent.

Initially it should be noted that the present application is a continuation application of patent application 09/552,399, now U.S. Patent No. 6,601,137 which has the same inventive entity and the same assignee as the instant application. The disclosures relating to the claims in question in the instant application and U.S. Patent No. 6,601,137 are identical. Accordingly, there is clearly a commonly disclosed embodiment in the application and the patent.

A comparison of independent claims 1 and 9 of the instant case with claims 1, 2, and 4 of U.S. Patent No. 6,601,137 reveals that these two application claims define a generic embodiment of the species covered by the patented claims 1, 2, and 4 of U.S. Patent No. 6,601,137. Accordingly, the generic application claims 1 and 9 are anticipated by the patented species claims 1, 2, and 4 of U.S. Patent No. 6,601,137, and therefore precludes the issuance of application claims 1 and 9 in accordance with **In re Goodman**. In other words, patent claims 1, 2, and 4 already cover, or "read on", claims 1 and 9 of the application. This is essentially the epitome of obviousness since the application claims are not "in any way unobvious" over the patented claims.

With respect to claim 1 of the instant application and claim 1 of the U.S. Patent No. 6,601,137, the side-by-side analysis is as follows:

| <u>U.S. Application No. 10/627,512</u> | <u>U.S. Patent No. 6,601,137</u> |
|---|---|
| 1. A disk drive for servicing host commands, comprising: | 1. A disk drive for servicing host commands, comprising: |
| cache memory having a plurality of memory clusters for caching disk data of disk sectors identified by logical block addresses; and | cache memory having a plurality of memory clusters for caching disk data of disk sectors identified by logical block addresses; and |
| a cache control system including a tag memory having a plurality of tag records, each tag record for defining a variable length segment of the memory clusters for caching disk data for a range of logical block addresses and each tag record for indicating the range of logical block addresses, | a cache control system including a tag memory having a plurality of tag records, each tag record for defining a variable length segment of the memory clusters for caching disk data for a range of logical block addresses and each tag record for indicating the range of logical block addresses, each tag record including an entry for a start logical block address and a count of the number of disk sectors associated with the tag record, |
| a scan engine only usable for scanning the tag records having means for receiving a range of logical block addresses associated with a host command, | a scan engine only usable for scanning the tag records having means for receiving a range of logical block addresses associated with a host command, |
| means for reading the ranges of logical block addresses defined by the tag records, | means for reading the ranges of logical block addresses defined by the tag records, |
| means for comparing the range of logical block addresses associated with the host command with the ranges of logical block addresses indicated in the tag records, | means for comparing the range of logical block addresses associated with the host command with the ranges of logical block addresses indicated in the tag records, |

| | |
|---|---|
| means for providing scan results, based on a comparison by the means for comparing, indicating overlap between the logical block address range associated with the host command and the ranges of logical block addresses indicated in the tag records. | means for providing scan results, based on a comparison by the means for comparing, indicating overlap between the logical block address range associated with the host command and the ranges of logical block addresses indicated in the tag records. |
|---|---|

Claims 2-6 and 10-14 are rejected as being dependent upon a previously rejected claim.

Response to Arguments

Applicant's Arguments regarding the Declaration filed under 37 CFR 1.131 are persuasive. Thus, the previous rejections attributed to the Sokolov et al. reference have been withdrawn.

Allowable Subject Matter

Claims 17-22 are allowed over the prior art of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art corresponds to related cluster systems.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Peugh whose telephone number is 703-306-5843. The examiner can normally be reached on Monday-Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Friday's from 7:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks, can be reached on (703) 308-1756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 18, 2004


Brian R. Peugh
Patent Examiner
Art Unit 2187